

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 09256075  
PUBLICATION DATE : 30-09-97

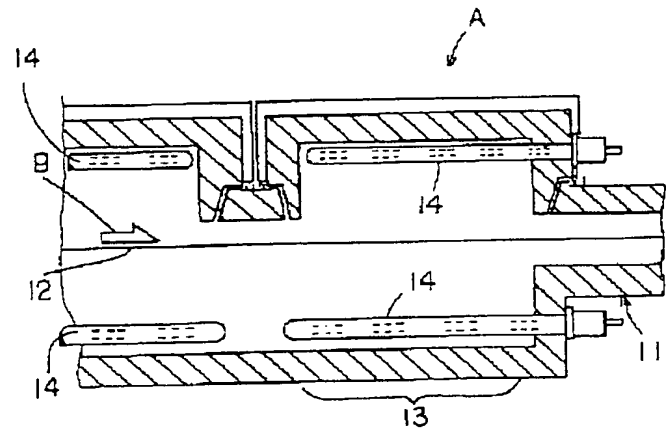
APPLICATION DATE : 22-03-96  
APPLICATION NUMBER : 08093560

APPLICANT : NITTETSU PLANT DESIGNING CORP;

INVENTOR : MATSUO KOICHI;

INT.CL. : C21D 9/56 C21D 1/34

TITLE : UNIFORM HEATING DEVICE FOR  
CONTINUOUS HEAT TREATMENT  
FURNACE



ABSTRACT : PROBLEM TO BE SOLVED: To uniformly execute heat treatment to the whole surface of a steel strip and to reduce the meandering and the heat buckle of the steel strip by parallel arranging plural radiant tubes in the width direction of the steel strip and controlling the temp. distribution in the width direction of the steel strip in continuous heat treatment furnace.

SOLUTION: Plural pieces of the radiant tubes 14 for heating the steel strip 12 are arranged in the upper and lower surfaces of radiant tube fitting part 13 in a uniform heating device A in the contiguous heat treatment furnace. The radiant tube 14 is formed in a cylindrical shape and arranged with its longitudinal direction matched with the carrying direction of the steel strip 212 and also parallel with the steel strip 12. Further, plural radiant tubes 14 are parallel arranged in the width direction of the steel strip 12 like a raft state and the calorific value of the heat source can independently be adjusted for each source by changing the load of each heat source. Atmospheric gas of N<sub>2</sub> gas, etc., is filled up in the inner part of the furnace body 11 and the steel strip 12 is heated with the radiation heat from the radiant tubes 14. Thermal crown of the hearth roll can be adjusted by controlling the temp. distribution in the axial direction of the roll with the radiant tubes 14.

COPYRIGHT: (C)1997, JPO